Driven by a yearning to amass knowledge in the field of ecology, not for the purpose of simply graduating from college, but rather to advance amphibian conservation, Friends of North Creek Forest (FNCF) intern Adam Hess is dedicating his life to scientific research in hopes of contributing valuable knowledge to prevent threatened species from going extinct.

Amphibian declines are a worldwide epidemic with one-third of species facing the threat of extinction. Hess and a team of two other Cascadia Community College (CCC) students, Caitlin Ihler and Maddy Fisher, are beginning a research project in North Creek Forest (NCF) to better understand our own amphibian habitat. The student team is led by FNCF Vice President David Bain, PhD, Biology, University of California at Santa Cruz and FNCF volunteer advisor, Bill House, M.S. Biology Emporia State University; B.S. Zoology, Southern Illinois University. The research has been approved by the Washington Department of Fish and Wildlife for a year-long amphibian study in the forest. The study will assist in developing a comprehensive understanding of amphibian species located in the forest and their seasonal distribution.

Hess, a member of the Amphibian Steward Network, is setting the bar high “We want to understand which species are in the forest, and their migration patterns through the UW wetlands and the rest of the corridor.” But Hess isn’t stopping in Bothell, he also has goals of one day traveling to Peru for amphibian research.

Hess began his research in NCF in 2012, under Dr. Bain’s guidance, working with Caitlin and Maddy to survey plant species, leaf litter depth, and percentage of canopy cover across a six acre plot. His goal is to contribute to a more in-depth study that might be used to configure the best placement for a recreational trail through NCF. Twenty years from now Hess envisions a network of trails that will provide access to the community without disturbing wildlife. “There has to be something there that people want to protect, there has to be some use for it,” Hess said, recognizing the importance of granting access to the forest in order to rally support for conserving it. Hess believes a vital part of his research is in assisting the ultimate goal of community engagement. “That’s the important part of the work.”

Meeting the definition of a true urban forest with a freeway bordering the east and a housing development along the west, it is unclear how storm water runoff affects the NCF ecosystem. Hess believes there are ample opportunities for students to research the effects of urbanization on water quality. “Education is a key part in conservation,” Hess proclaims.

After taking an ecology class at CCC in which the professor joked about dirty field notebooks as evidence of participation, Hess began to realize the value of education in the outdoors. “If you’re actually out there getting your hands dirty, [students] are more inclined to get interested. The best class I’ve ever had was a wetland restoration class with Midori Sakura.”

Inspired by his wetland restoration class studies, Hess also has other project ideas he’d like to see implemented suggesting “a much broader research field going into how the forest is used as a corridor between [NCF], the [UW Bothell] wetland restoration site, down North Creek, all the way to Lake Washington.”

Following graduation from CCC this summer, Hess anticipates transferring to UW Bothell where he will continue pursuing undergraduate research opportunities in partnership with FNCF. If you don’t happen to run into him on campus or out at a FNCF restoration work party, he’s probably tending to his extensive poison dart frog collection or out in the wilderness hiking and fishing.

Although it’s uncertain which research project this aspiring young student will be working on next, one thing will always hold true—if you need expert advice on amphibians, Hess is the guru you’ll want to track down!

Krystle Minerich

FNCF Executive Director Intern